

In the Claims

Please amend the claims presented during the international phase as follows.

Applicant presents a full set of claims showing markups of the claims with insertions and deletions indicated by underlining and strikethrough text (or double bracketing), respectively.

1. (Currently amended) A method for chromatographic separation of a molecule, wherein a mobile phase and charged stationary phase are present and a charged amphipathic sugar polymer(s) is employed to modify the hydrophobic interaction between said the molecule and said charged stationary phase, and wherein the pH of said mobile phase is below the pI of the molecule (and thus the molecule carries a net positive charge) or the pH of the mobile phase is above the pI of the molecule (and thus the molecule carries a net negative charge).

2.-4. (Canceled)

5. (Currently amended) The [[A]] method of claim 1 according to claim 3 for separating a positively charged molecule from a solution comprising said the molecule and further components by hydrophobic interaction chromatography comprising applying a solution comprising said the molecule to a positively charged stationary phase which is non-covalently associated with a negatively charged amphipathic sugar polymer(s), and eluting said the molecule from said the stationary phase in a mobile phase.

6. (Currently amended) The [[A]] method of claim 1 according to claim 4 for separating a negatively charged molecule from a solution comprising said the molecule and further components by hydrophobic interaction chromatography comprising applying a solution comprising said the molecule to a negatively charged stationary phase which is non-covalently associated with a positively charged amphipathic sugar polymer(s), and eluting said the molecule from said the stationary phase in a mobile phase.

7. (Currently amended) The [[A]] method of claim 1 according to claim 3 for separating a positively charged molecule from a solution comprising said the molecule and further components by mixed mode hydrophobic interaction/ion exchange chromatography comprising applying a solution comprising said the molecule to a negatively charged

stationary phase which is non-covalently associated with a positively charged amphipathic sugar polymer(s), and eluting said the molecule from said the stationary phase in a mobile phase.

8. (Currently amended) The [[A]] method of claim 1 according to claim 4 for separating a negatively charged molecule from a solution comprising the molecule and further components by mixed mode hydrophobic interaction/ion exchange chromatography comprising applying a solution comprising the molecule to a positively charged stationary phase which is non-covalently associated with a negatively charged amphipathic sugar polymer(s), and eluting the molecule from the stationary phase in a mobile phase.

9. (Currently amended) The [[A]] method of claim 1 according to any of the preceding claims, wherein the mobile phase comprises an amphipathic sugar polymer(s).

10. (Currently amended) The [[A]] method of claim 1 according to any of the preceding claims, wherein the mobile phase comprises a charged amphipathic sugar polymer(s).

11. (Currently amended) The [[A]] method of claim 1 according to claim 7 for separating a positively charged molecule from a solution comprising the molecule and further components by mixed mode hydrophobic interaction/ion exchange chromatography comprising applying a solution comprising the molecule to a negatively charged stationary phase, and eluting the molecule from the stationary phase in a mobile phase comprising a negatively charged amphipathic sugar polymer(s).

12. (Currently amended) The [[A]] method of claim 1 according to claim 8 for separating a negatively charged molecule from a solution comprising the molecule and further components by mixed mode hydrophobic interaction/ion exchange chromatography comprising applying a solution comprising the molecule to a positively charged stationary phase, and eluting the molecule from the stationary phase in a mobile phase comprising a positively charged amphipathic sugar polymer.

13.-49. (Canceled)

50. (Original) A method for separating a molecule from a solution comprising a charged molecule and further components by hydrophobic interaction chromatography comprising applying the solution comprising the molecule to an oppositely charged stationary phase, and eluting the molecule from the stationary phase in a mobile phase, characterised in that the stationary phase comprises a charged amphipathic sugar polymer(s).

51. (New) A method for separating a molecule from a solution comprising the molecule and further components by hydrophobic interaction chromatography comprising applying the solution comprising the molecule to a charged stationary phase, and eluting the molecule from the stationary phase in a mobile phase, characterised in that:

(a) the charged stationary phase is non-covalently associated with a charged amphipathic sugar polymer(s), or the stationary phase comprises a charged amphipathic sugar polymer, and/or

(b) the molecule is non-covalently associated with a charged amphipathic sugar polymer(s),

and wherein the pH of the mobile phase is below the pI of the molecule (and thus the molecule carries a net positive charge) or the pH of the mobile phase is above the pI of the molecule (and thus the molecule carries a net negative charge).

52. (New) A method according to claim 51 for separating a positively charged molecule from a solution comprising the molecule and further components by hydrophobic interaction chromatography comprising applying a solution comprising the molecule to a positively charged stationary phase which is non-covalently associated with a negatively charged amphipathic sugar polymer(s), and eluting the molecule from the stationary phase in a mobile phase.

53. (New) A method according to claim 51 for separating a negatively charged molecule from a solution comprising the molecule and further components by hydrophobic interaction chromatography comprising applying a solution comprising the molecule to a negatively charged stationary phase which is non-covalently associated with a positively charged amphipathic sugar polymer(s), and eluting the molecule from the stationary phase in a mobile phase.

54. (New) A method according to claim 51 for separating a positively charged molecule from a solution comprising the molecule and further components by mixed mode hydrophobic interaction/ion exchange chromatography comprising applying a solution comprising the molecule to a negatively charged stationary phase which is non-covalently associated with a positively charged amphipathic sugar polymer(s), and eluting the molecule from the stationary phase in a mobile phase.

55. (New) A method according to claim 51 for separating a negatively charged molecule from a solution comprising the molecule and further components by mixed mode hydrophobic interaction/ion exchange chromatography comprising applying a solution comprising the molecule to a positively charged stationary phase which is non-covalently associated with a negatively charged amphipathic sugar polymer(s), and eluting the molecule from the stationary phase in a mobile phase.

56. (New) A method according to claim 51, wherein the mobile phase comprises an amphipathic sugar polymer(s).

57. (New) A method according to claim 51, wherein the mobile phase comprises a charged amphipathic sugar polymer(s).

58. (New) A method according to claim 51 for separating a positively charged molecule from a solution comprising the molecule and further components by mixed mode hydrophobic interaction/ion exchange chromatography comprising applying a solution comprising the molecule to a negatively charged stationary phase, and eluting the molecule from the stationary phase in a mobile phase comprising a negatively charged amphipathic sugar polymer(s).

59. (New) A method according to claim 51 for separating a negatively charged molecule from a solution comprising the molecule and further components by mixed mode hydrophobic interaction/ion exchange chromatography comprising applying a solution comprising the molecule to a positively charged stationary phase, and eluting the molecule from the stationary phase in a mobile phase comprising a positively charged amphipathic sugar polymer.

60. (New) A method according to claim 1 or claim 51, wherein the or an amphipathic sugar polymer is selected from the group consisting of a cyclic helical or linear sugar polymer.
61. (New) A method according to claim 1 or claim 51, wherein the or an amphipathic sugar polymer is a cyclodextrin or derivative thereof.
62. (New) A method according to claim 1 or claim 51, wherein the amphipathic sugar polymer is an inulin or a derivative thereof.
63. (New) A method according to claim 1 or claim 51, wherein the amphipathic sugar polymer is an inulin derivative substituted with one or more charged group selected from the group consisting of: a sulfonyl group, sulfonylalkyl group, a phosphonyl group, a phosphonylalkyl group, a carboxyl group, a carboxyalkyl group, an alkyl-succinyl group, a quaternary ammonium group, an aminoalkyl group, an amino group, an alkylamino group and a dialkylamino group
64. (New) A method according to claim 1 or claim 51 further comprising removal of amphipathic sugar polymer(s) from the eluate.
65. (New) A method according to claim 1 or claim 51, wherein the molecule for separation is a protein or a nucleic acid.